BRUHAT BANGALORE MAHANAGARA PALIKE

KODIGEHALLI SUBDIVISION

WARD NO.07, Byatarayanapura

Name of work: Improvements to drains of byatarayanapura gramatana road (road next to HDFC bank) of Byatarayanapura

PCODE:- P1771

Est Cost : 25.00 LAKHS

Name of Work:- Improvements to drains of byatarayanapura gramatana road (road next to HDFC Bank) in ward No.07 Byatarayanapura

Estimated Cost:- 25.00 akhs

S.N	DESCRIPTION OF WORK	Unit	N	L	B	D	QTY	RATE	AMOUNT
1	2	3	4	5	6	7	8	9	10
1	KSRRB 300-1. Earthwork excavation by manual means in rodinary soil involving an average horizontal throw upto 2 m and an average lift upto 1.5m, excavated surafce levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking clods complete as per specifications.. Pg No.143.Item No.19.1)								
	Basic Rate:	cum	**130.00**						
	Area Weightage @ 6%		7.80						
	Total		**137.80**						
	6th cross RHS (New drain)		1	82.00	0.95	1.00	77.90		
	LHS existing drain Desilting		1	82.00	0.45	0.60	22.14		
	Shabarinagara Main Road		2	104.00	0.95	1.00	197.60		
	Rain water harvesting		6	3.14*0.8*0.8		1.70	5.10		
					TOTAL		**302.74**	137.80	41718.00
2	KSRB 4-1.3: Providing and laying in position plain cement concrete of nominal mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal machine mixed, conrete laid in layers not exceeding 15 cms. Thick well compacted in foundation and plinth, including cost of all materials labour, HOM of machinery, curing complete as per specification . **(Pg.No.13, It.4.3)**								
	Basic Rate:	cum	5102.00						
	Area Weightage @ 6%		306.12						
	Total		5408.12						
	RCC DRAIN-BOTTOM								
	6th cross RHS (New drain)		1.00	82.00	0.95	0.15	11.69		
	Shabarinagara Main Road		2.00	104.00	0.95	0.15	29.64		
					TOTAL		**41.33**	5408.12	223491.00

3	KSRB 4.2.2: Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 Kgs with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregates @ 0.460 cum with superplastizers @ 3lts confirming to IS 9103-1999 RE affirmed - 2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, stair case lintels, retaining walls return walls, walls(anythickness) including attached plasters columns piers abutments pillars posts struts butresses string or lacing courses parapets copings, bed blocks , plain windows cills fillets etc., including cost of all materials labour HOM of machinery curing complete as per specifications. Seocifications No. KBS 4.1,4.6 (Page NO. 14, Item NO. 4.11)								
	Basic Rate:	cum	5659.00						
	Area Weightage @ 6%		339.54						
	Total		5998.54						
	Bottom								
	6th cross RHS (New drain)		1.00	82.00	0.95	0.15	11.69		
	Shabarinagara Main Road		2.00	104.00	0.95	0.15	29.64		
	Side Wall								
	6th cross RHS (New drain)	**1x2**	2.00	82.00	0.15	0.60	14.76		
	Shabarinagara Main Road	**2x2**	4.00	104.00	0.15	0.60	37.44		
							93.53	5998.54	561014.00
4	Providing **TMT Steel Reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.(Page No.18, Item No.4.46.2)								
	Basic Rate:	Tonne	70966.00						
	Area Weightage @ 6%		4257.96						
	Total		75223.96						
	Reinforcement for side wall						93.53		
			At 55 Kg % per cum				**5.14**	75223.96	386943.00
5	Providing and removing Centering, shuttering, strutting, propping etc., for columns, pillars, piers, abutments, post and struts, square / **rectangular slabs /side walls** polygon in plan including cost of materials, labour complete as per specification and directions of the Engineer in charge.(Page No.16, Item NO.4.32)								
	Basic Rate:	Sqm	456.00						
	Area Weightage @ 6%		27.36						
	Total		483.36						
	SIDE WALL								
	6th cross RHS (New drain)	1x4	4	82.00		0.60	196.80		

	Shabarinagara Main Road	2x4	8	104.00		0.60	499.20		
							696.00	483.36	336419.00
6	Providing and fixing 10cms thick pre cast RCC covering slab using reinforced cement concrete M20 mix with stone aggregate 20mm and down size including centring shuttering reinforcement and bar bending machine mixed concrette laid in layers not exceeding 15 cm thick wellcompacted cost of all materials labour curing complete as per specfications (Data Rate Approved)								
	DETA RATE	**Sqm**							
	Covering Slab								
	6th cross RHS (New drain)		137		0.60	0.75	61.65		
	Shabarinagara Main Road		349		0.60	0.75	157.05		
							218.70	2100.00	459270.00
7	Providing and fixing Pre cast solid concrete kerb stones made out of CC 1:2:4 of size 450x200x400 mm and finished with CM 1:3 plastering and finishing cutting etc., complete.Pg No. 27, Item No.5.29.1								
	6th cross RHS (New drain)		1	82.00			82.00		
	Existing drain LHS		1	82.00			82.00		
			TOTAL(total length/0.45)				**265.00**	477.00	126405.00
	Basic Rate:	Nos	450.00						
	Area Weightage @ 6%		27.00						
	Total		477.00						
8	KSRB 5-9.1:Providing and applying ready mix priming coat over ocncrete / masonry, / asbestos cement sheet / plastered surfaces includding preparing the surface after thorougly cleaning of oil, grease, dirt and other foreign matter and sand papering including cost of materials, labour compelte as per specifications. Page No. 124 / Item No. 15.80								
			265.00		0.45		119.25		
					TOTAL		**119.25**	39.22	4677.00
	Basic Rate:	sqm	37.00						
	Area Weightage @ 6%		2.22						
	Total		39.22						
9	KSRRB M2900-2.1. Laying Reinforced cement concrete pipe NP2 / prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets complete as per specifications. MORTH Specification No. 2900 B. 1200 mm dia MORTH Specification No. 1000,2300 Page No. 255, Item No. 34.7.8, PWD SR 2018-19								
			6	1.50	--	--	9.00		
					TOTAL		**9.00**	5976.28	**53786.52**
	Basic Rate:	mtr	5638.00						
	Area Weightage @ 6%		338.28						

	Total		5976.28						
10	Providing 100mm and down size nominal size. (Pg No.I.Item No.23)								
	For Pit		6	0.28		0.60	1.02		
	(3.14x0.6*0.6)/4	Cum				**TOTAL**	**1.02**	987.62	**1007.37**
11	Providing 40mm and down size nominal size (Pg No.II.Item No.25)								
	For Pit		6	0.28		0.40	0.68		
	(3.14x0.6*0.6)/4	Cum				**TOTAL**	**0.68**	1091.43	**742.17**
12	Providing 20mm and down size nominal size (Pg No.II.Item No.28)								
	For Pit		6	0.28		0.40	0.68		
	(3.14x0.6*0.6)/4	Cum				**TOTAL**	**0.68**	1091.43	**742.17**
13	Providing Fine aggrgate 2.36mm nominal size (Pg No.II.Item No.32)								
	For Pit		6	0.28		0.30	0.51		
	(3.14x0.6*0.6)/4	Cum				**TOTAL**	**0.51**	1054.29	**537.69**
14	Providing and fixing MS Grating 260x260 mm(Page No.1X, Sl No.234, code No.0771)								
			70				70.00		
						TOTAL	**70.00**	84.75	5932.50
15	KSRRB M100-1 Loading and unloading of stone boulder/stone aggregates/ sand/ kanker/ moorum. KSRRB M100-1:Placing tipper at loading point loading with front end loading, dumping turning for return trip, excluding time for haulage and return trip complete as per specification MORTH Chapter 1 (Page 136, item No. 17.1)								
	Basic Rate	cum	**57.00**				302.74	94.34	28561.00
	Rs. 2.50 Tonne Km.								
	Average Weight of earth 1.28 Tonne/Km.								
	For 10 Km								
	Rs.2.50X1.28TonneX10K		**32.00**						
	Total		**89.00**						
	Add Area Weightage6%		**5.34**						
			94.34						
16						**Sub Total**			2231246.43
17						**Add 12% GST charges**			267749.57
18						**Miscelleneous charges**			1004.00
19						**Total**			2500000.00

Technical Sanction
Accorded For ..25.00Lakh
Head of A/C.....1771
CER NO :.....15..... Dt:09.05.19

JA CE (YNK)

Administrative Approval
Accorded For ..25.00Lakh
Head of A/C.....1771
CER NO :.....30..... Dt:09.05.19

JA CE (YNK)

1)This is certified that the work spot comes under BBMP limits only.
2) The work spot is inspected by me
3) The items Provided in the Estimate are quite Essential
4)The rates are as per CSR of 2018-19 year of PWD Bangalore Circle.

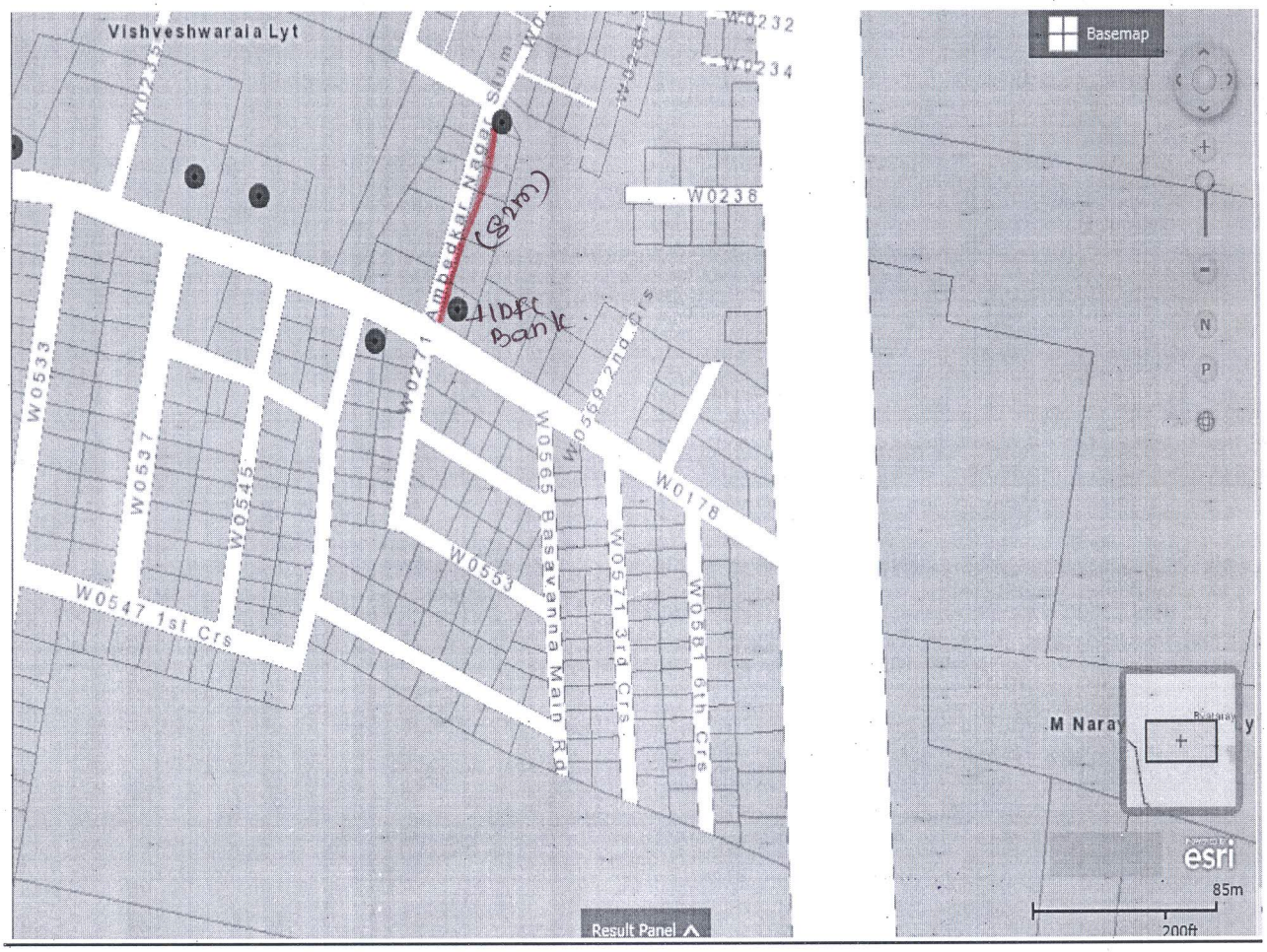
Asst.Engineer
Ward no.7

Asst.Exe.Engineer
Kodigehalli Sub-division
B.B.M.P.

Executive Engineer
Byatrayanapura Division
B.B.M.P.

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092

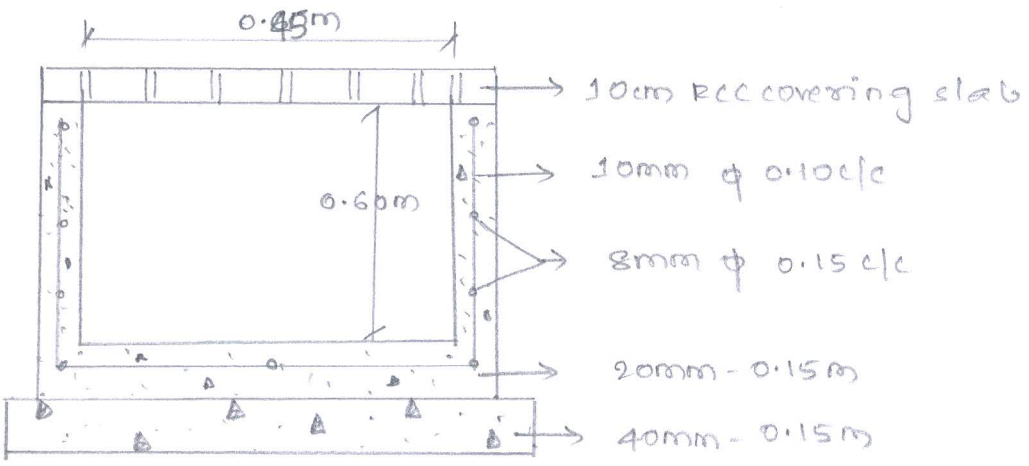
Name of work:- Improvements to drains of byatarayanapura gramatana road (road next to HDFC bank) of Byatarayanapura



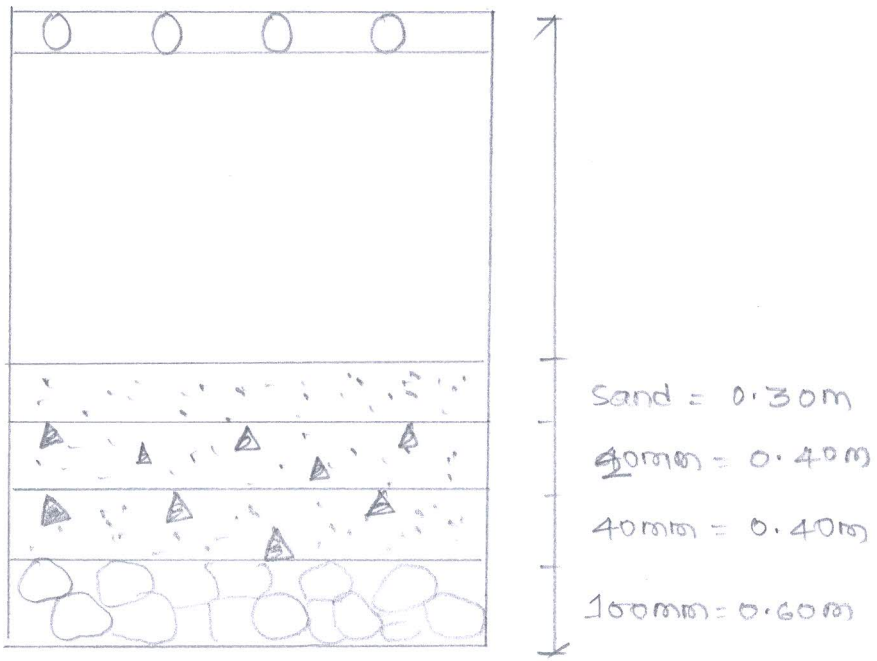
AE(NL)

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092

Name of Work:- Improvements to drains of byatarayanapura gramatana road (road next to HDFC bank) of byatarayanapura.



CROSS-SECTION OF RCC DRAIN:-



CROSS SECTION OF RWH UNIT.

Abhilly N.D
AE(Civil)

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092

(R.C.C Precast Slab) = 1.20 x 0.60 = 0.72 m²

DATA RATE FOR DRAIN COVERING SLAB (1.20 X 0.60)

A	KSRB 4.5.5 Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded metal coarse aggregates @ 0.87Rcum and fine aggregates @ 0.459cum with superplasticizer @ 3lts confirming to IS9103 1999 reaffirmed 2003, machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintes, retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, structs, buttresses, string or facing courses, parapets, coping tied blocks anchor blocks, plain window cills, fillets, etc, including cost of all materials, labour HOM of machinery, curing complete as per specification Specification No: KBS 4.1, 4.6 (P:130, 4.11 PW,P & IWTD,Hore Circle SR-2014-15) (RCC 1:1.5:3)							
	cement concrete 1:2:4							
	Cover slab size (1.00 X 0.60)							
		1	1.20	0.60	0.10	0.072	6065.28	436.70
	Basic Rate	5616.00						
	Add 8% Area weightage	449.28						
	Total	6065.28						
B	KSRB 4.6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work of vertical surface such as walls of any thickness, including attached pilasters, buttressess, plinth and string courses coat of all materials, labour complete as per specification (P: 15/4.31 PW,P & IWTD,B'lore Circle SR-2014-15)							
	centring							
	sides	1	3.60		0.10	0.36		
	btm	~~1~~	~~1.20~~	~~0.60~~		~~0.72~~		
						1.08	292.68	~~316.09~~
	Basic Rate	271.00				0.36		105.40
	Add 8% Area weightage	21.68						
	Total	292.68						
C	KSRB 4.9.2: Providing T.M.T STEEL REINFORCEMENT FOR RCC work including straightening, cutting, bending, hooking, placing in position lapping and / or welding wherever required typing with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour HOM of machinery complete as per specifications. (P:19/4.48 PW,P & IWTD,B'lore Circle SR-2014-15)						tonne	
	steel					→ 0.889 kg/m.		
	main bars 12mm 100mm C/C spacing	1	7	1.10	0.89	6.85	6.85	
	Dist bars 12mm 100mm C/C spacing	1	(12)	0.55	0.89	5.87		
						12.72	12.72 kg	996.6
						(0.01)	78351.84	937.18
	Basic Rate	72548.00			0.012 MT			996.65
	Add 8% Area weightage	5803.84						
	Total	76351.84						
				2137.14				1749.98
	For 1 Sqm=	~~1749.98~~ / 0.72 =		2430.53				1538.74
		1538.74	Say	2430.00 / Sqm				

Rupees Two thousand four hundred only 2100.00 / Sqm

d by CamScanner